

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1-7 (Cancelled)

Claim 8 (Withdrawn): A monoclonal antibody as claimed in claim 7, wherein the substitution is at any one or more of positions 143, 144 and 145.

Claim 9 (Withdrawn): A monoclonal antibody as claimed in claim 7, wherein the substitution is at any one or more of positions 143, 144 and 145.

Claim 10 (Currently Amended): A monoclonal antibody ~~as claimed in claim 1,~~ wherein at least one of said two mutant forms which binds to two or more mutant forms of HBsAg, is wherein said two or more mutant forms are selected from the group consisting of:

(a) Mutant HBsAg I ("NP" HBsAg): met to ile at amino acid 133; phe to his amino acid 134; and asp to val at amino acid 144;

(b) Mutant HBsAg II ("MAM" HBsAg): met to ile at amino acid 133; phe to asn at amino acid 134; pro to ser at amino acid 142; ser to leu at amino acid 143;

and gly to lys at amino acid 145;

~~(c) Mutant HBsAg III ("SZ" HBsAg): gly to arg at amino acid 145; and~~

(d) Mutant HBsAg IV ("SP" HBsAg): ser to met at amino acid 143.

Claim 11 (Cancelled)

Claim 12 (Currently amended): A monoclonal antibody as claimed in claim 4 10 that is an IgG, IgM or IgA immunoglobulin.

Claim 13 (Original): Monoclonal antibody P2D3 as produced by the hybridoma designated P2D3 and deposited at the ECACC under accession number ECACC 97042331.

Claim 14 (Original): Monoclonal antibody M3A10 as produced by the hybridoma designated M3A10 and deposited at the ECACC under accession number ECACC 97042330.

Claim 15 (Original): Monoclonal antibody M4F5 as produced by the hybridoma designated M4F5 and deposited at the ECACC under accession number ECACC 97042519.

Claim 16 (Currently amended): A monoclonal antibody as claimed in claim 4 10 , in a humanized form.

Claim 17 (Withdrawn): A fragment or a derivative of a monoclonal antibody as claimed in claim 1.

Claim 18 (Withdrawn): A method of producing a hybridoma capable of producing a monoclonal antibody as claimed in claim 1, which comprises immunizing an animal with wild type HBsAg or a mutant form of HBsAg antigen, optionally in the form of an appropriate antigenic fragment or derivative thereof, immortalizing antibody producing cells to form hybridomas, screening the hybridoma cultures against wild type HBsAg and two or more mutant forms of HBsAg, optionally in the form of an appropriate antigenic fragment or derivative thereof, and selecting those hybridomas that produce antibodies that bind to wild type HBsAg and two or more mutant forms of HBsAg.

Claim 19 (Cancelled)

Claim 20 (Withdrawn): A hybridoma capable of producing a monoclonal antibody as claimed in claim 1.

Claim 21 (Withdrawn): Hybridoma designated P2D3 and deposited at the ECACC under accession number ECACC 97042331.

Claim 22 (Withdrawn): Hybridoma designed M3A10 and deposited at the ECACC under accession number ECACC 97042330.

Claim 23 (Withdrawn): Hybridoma designated M4F5 and deposited at the ECACC under accession number ECACC 97042519.

Claims 24-25 (Cancelled)

Claim 26 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample under investigation with a monoclonal antibody as claimed in claim 1 or a fragment or derivative thereof, or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claim 27 (Cancelled)

Claim 28 (Withdrawn): An immunoassay as claimed in claim 26, in a homogenous or heterogeneous format.

Claim 29 (Withdrawn): An immunoassay as claimed in claim 26, in a capture or a competitive format.

Claim 30 (Withdrawn): An immunoassay as claimed in claim 26, wherein an immunoassay for the detection of antibodies to hepatitis B core protein (HBc) is carried out simultaneously with the assay for HBsAg.

Claim 31 (Withdrawn): An immunoassay kit that comprises a monoclonal antibody as claimed in claim 1 or a fragment or derivative thereof, or a combination of two or more thereof, and other reagents required for carrying out an immunoassay for HBsAg and optionally also reagents for detecting anti-HBc antibodies.

Claims 32-37 (Cancelled)

Claim 38 (Withdrawn): A composition suitable for use therapeutically or prophylactically for passive immunization against HBV which comprises a monoclonal antibody as claimed in claim 1, or a fragment or derivative thereof, or a combination of two or more thereof, in admixture with a pharmaceutically suitable carrier.

Claim 39 (Cancelled)

Claim 40 (Withdrawn): A method of therapeutic or prophylactic passive immunization against HBV infection, which comprises administering to a subject a therapeutically or prophylactically effective amount of a monoclonal antibody as claimed in claim 1, or a fragment or derivative thereof, or a combination of two or more thereof.

Claim 41 (Cancelled)

Claim 42 (Withdrawn): An anti-idiotypic antibody to a monoclonal antibody as claimed in claim 1 or a fragment or derivative thereof.

Claim 43 (Withdrawn): Isolated Mutant HBsAG I, Mutant HBsAG II, Mutant HBsAG III or Mutant HBsAG IV as defined in claim 10.

Claims 44-80 (Cancelled)

Claim 81 (Withdrawn): A fragment or a derivative of the monoclonal antibody of claim 2.

Claim 82 (Withdrawn): A fragment or a derivative of the monoclonal antibody of claim 3.

Claim 83 (Withdrawn): A fragment or a derivative of the monoclonal antibody of claim 4.

Claim 84 (Withdrawn): A fragment or a derivative of the monoclonal antibody of claim 5.

Claim 85 (Withdrawn): A fragment or a derivative of the monoclonal antibody of claim 6.

Claim 86 (Withdrawn): A hybridoma which produces the monoclonal antibody of claim 2.

Claim 87 (Withdrawn): A hybridoma which produces the monoclonal antibody of claim 3.

Claim 88 (Withdrawn): A hybridoma which produces the monoclonal antibody of claim 4.

Claim 89 (Withdrawn): A hybridoma which produces the monoclonal antibody of claim 5.

Claim 90 (Withdrawn): A hybridoma which produces the monoclonal antibody of claim 6.

Claim 91 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample with the monoclonal antibody of claim 2 or a fragment or derivative thereof or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claim 92 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample with the monoclonal antibody of claim 3 or fragment or derivative thereof or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claim 93 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample with the monoclonal antibody of claim 4 or fragment or derivative thereof or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claim 94 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample with a monoclonal antibody of claim 5 or fragment or derivative thereof or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claim 95 (Withdrawn): An immunoassay for the detection of HBsAg, which comprises contacting a sample with a monoclonal antibody of claim 6 or fragment or derivative thereof or a combination of two or more thereof, and detecting any resulting antigen-antibody complex.

Claims 96-97 (Cancelled)